CLAIMS

1. A method of processing an analog signal whose frequency spectrum exhibits over a determined bandwidth two main lobes separated by a frequency band where the power is negligible, characterized in that it comprises a step of sampling according to a determined sampling frequency, and prior to this sampling step, a step consisting in performing a frequency translation of the two main lobes towards one another with a view to reducing the bandwidth and hence the sampling frequency.

2. The method as claimed in the preceding claim, characterized in that, the signal comprising a carrier and a subcarrier of determined frequency and the main lobes exhibiting determined bandwidths, the step of translating the lobes is obtained by multiplying the analog signal by a signal of the type $\cos(\omega t)$, ω being determined as a function of the subcarrier frequency and of the bandwidth of the main lobes.

3. The method as claimed in the preceding claim, characterized in that the translation of the main lobes having generated spurious lobes, it furthermore comprises, prior to the sampling, a step of filtering the translated lobes, with a view to eliminating the spurious lobes.

4. The method as claimed in claim 1, characterized in that the translation of the lobes and the sampling are grouped together into a single step consisting in sampling the analog signal according to a specific sampling frequency fe_s.

5. The method as claimed in the preceding claim, characterized in that the analog signal having been modulated by a carrier and a subcarrier of frequency f_{sp}, the frequency fe_s is related to the frequency f_{sp} by

the following relation $f_{sp} = N.fe_s - fe_s/4$, N being a determined integer greater than or equal to 1.

6. The method as claimed in the preceding claim, characterized in that N is the largest value making it possible to obtain the relation.

7. The method as claimed in one of the preceding claims, characterized in that it comprises a prior step of converting the analog signal to baseband.

8. The method as claimed in the preceding claim, characterized in that, the frequency spectrum exhibiting sidelobes around each main lobe, the sidelobes are eliminated by filtering.

9. The method as claimed in one of the preceding claims, characterized in that the main lobes are identical.

10. The method as claimed in one of the preceding claims, characterized in that the analog signal is a signal modulated according to a BOC type modulation.

11. The method as claimed in one of the preceding claims, characterized in that the analog signal is a radionavigation signal.

12. The method as claimed in claims 10 and 11, characterized in that, the BOC signal comprising a carrier, a code and a subcarrier, respectively exhibiting determined frequencies, it comprises a step of digitizing the sampled signal and a step of demodulating the digitized signal based on the use of a code and of a subcarrier that are generated locally, the local code being generated on the basis of the frequency of the code, the local subcarrier being generated on the basis of the frequency of the

subcarrier determined and reduced during the step of translating the lobes.

13. The method as claimed in any one of claims 11 or 12, characterized in that the radionavigation signal is that of the Galileo or Glonass or GPS system.

14. A device for processing an analog signal whose frequency spectrum exhibits over a determined bandwidth two main lobes separated by a frequency band where the power is negligible, characterized in that it comprises an element for translating the frequency of the main lobes towards one another which is able to reduce the bandwidth.

15. The device as claimed in the preceding claim, characterized in that it furthermore comprises a converter of the analog signal into baseband linked to the device for translating the main lobes and placed upstream of the translation device.

16. The device as claimed in the preceding claim, characterized in that it furthermore comprises a bandpass filter linked to the baseband analog signal converter and placed between the baseband converter and the translation device.

17. The device as claimed in any one of claims 14 to 16, characterized in that the signal comprising a carrier and a subcarrier of determined frequency and the main lobes exhibiting determined bandwidths, the device for translating the main lobes comprises a multiplier of the analog signal by a signal of the type $\cos(\omega t)$, ω being determined as a function of the subcarrier frequency and of the bandwidth of the main lobes.

18. The device as claimed in the preceding claim, characterized in that the device for translating the

main lobes furthermore comprises, linked to the multiplier and placed downstream of the latter, a low-pass filter.

19. The device as claimed in any one of claims 17 or 18, characterized in that the multiplier is linked to a sampler.

20. The device as claimed in any one of claims 14 to 16, characterized in that the device for translating the main lobes comprises a sampler able to sample the analog signal according to a specific sampling frequency fe_s.

21. The device as claimed in any one of claims 19 or 20, characterized in that the sampler is linked to a digitizer.

22. The device as claimed in any one of claims 14 to 21, characterized in that the analog signal is a radionavigation signal.

23. The device as claimed in the preceding claim taken from claim 21, characterized in that, the radionavigation signal comprising a carrier, a code and a subcarrier that are generated by a satellite, respectively exhibiting determined frequencies, it comprises, linked to the digitizer, a feedback loop for slaving a code and a subcarrier that are generated locally by the device, this loop comprising an element for calculating the local phase of the code on the basis of the code frequency determined and an element for calculating the local phase of the subcarrier on the basis of a subcarrier frequency calculated on the basis of the determined subcarrier frequency, these elements for calculating phase being distinct.

24. The device as claimed in any one of claims 14 to 23, characterized in that the lobes are identical.

25. A receiver of a radionavigation system, characterized in that it comprises a device for processing an analog signal according to any one of claims 14 to 24.